Research Note

Mass Political Support in Sweden: Retesting a Political-Economic Model

Lee Sigelman, University of Kentucky

This paper tests a model of mass political support for Sweden, 1967-1974. The model is composed of two economic variables (the Consumer Price Index and assessments of the short-run employment situation) and two non-economic variables (media criticism of government and media pessimism). The model performs very well, accounting for approximately two-thirds of the variance in the popularity of the governing party, the Social Democrats. The most impressive showing is made by the unemployment variable, but the Consumer Price Index and media criticism also make important contributions. Concluding discussion centers on the implications of these findings for our understanding of Swedish politics and for the validity of political-economic models of mass political support.

Recent years have witnessed an explosion of theory and research on the political economy of government support. Most early work on the 'evaluation function' focused on Great Britain (e.g., Goodhart & Bhansali 1970; Miller & Mackie 1973) or the United States (Kramer 1971; Mueller 1973), but in quick succession political-economic models began to be tested for other advanced democracies as well, including Sweden and the other Scandinavian countries (Frey 1979; Jonung & Wadensjö 1979; Madsen 1980). The purpose of this note is to fit a model of the evaluation function in Sweden that builds directly upon the work of Frey, Jonung & Wadensjö, and Madsen, but even more directly upon that of Carlsson, Dahlberg & Rosengren (1980).

Madsen (1980) set out to predict the extent of electoral support for the governing parties of Denmark, Norway, and Sweden in parliamentary elections held between 1920 and 1973. Only in Sweden, he found, was there any evidence that the government's electoral support depended upon changing economic conditions — most notably, perhaps, fluctuations in the rate of unemployment. Frey (1979), drawing upon unpublished work by Kirchgässner, refocused attention away from election outcomes and toward periodic public evaluations of the national authorities, as indexed by quarterly data

Research Note
Mass Political Support in Sweden: Retesting a Political-Economic Model

Lee Sigelman, University of Kentucky

This paper tests a model of mass political support for Sweden, 1967-1974. The model is composed of two economic variables (the Consumer Price Index and assessments of the short-run employment situation) and two non-economic variables (media criticism of government and media pessimism). The model performs very well, accounting for approximately two-thirds of the variance in the popularity of the governing party, the Social Democrats. The most impressive showing is made by the unemployment variable, but the Consumer Price Index and media criticism also make important contributions. Concluding discussion centers on the implications of these findings for our understanding of Swedish politics and for the validity of political-economic models of mass political support.

Recent years have witnessed an explosion of theory and research on the political economy of government support. Most early work on the 'evaluation function' focused on Great Britain (e.g., Goodhart & Bhansali 1970; Miller & Mackie 1973) or the United States (Kramer 1971; Mueller 1973), but in quick succession political-economic models began to be tested for other advanced democracies as well, including Sweden and the other Scandinavian countries (Frey 1979; Jonung & Wadensjö 1979; Madsen 1980). The purpose of this note is to fit a model of the evaluation function in Sweden that builds directly upon the work of Frey, Jonung & Wadensjö, and Madsen, but even more directly upon that of Carlsson, Dahlberg & Rosengren (1980).

Madsen (1980) set out to predict the extent of electoral support for the governing parties of Denmark, Norway, and Sweden in parliamentary elections held between 1920 and 1973. Only in Sweden, he found, was there any evidence that the government's electoral support depended upon changing economic conditions — most notably, perhaps, fluctuations in the rate of unemployment. Frey (1979), drawing upon unpublished work by Kirchgässner, refocused attention away from election outcomes and toward periodic public evaluations of the national authorities, as indexed by quarterly data

on the popularity of the chief executive or governing party — in Sweden, the Social Democrats. For the United States (1953-1976), the United Kingdom (1959-1974), Germany (1957-1975) and Sweden (1967-1973), Frey fitted a support model composed of three economic indicators: the rates of inflation, unemployment and the growth of real disposable income. All three predictors, he found, significantly affected mass political support in all four nations, and always in the very same fashion: the lower the rates of inflation and unemployment and the higher the growth of real income, the higher the level of mass political support. Jonung & Wadensjö (1979) estimated essentially the same model as had Frey, save that they restricted their analysis to Sweden alone, used months rather than quarters as the units of analysis (interpolating poll results on support for the Social Democrats where necessary), and extended the observation period through 1978. Like Frey, they concluded that unemployment and inflation exerted strong influences on the popular standing of the governing party, but they found that the growth of real income exerted no independent effect.

What, then, can be said about the validity of the political-economic model of mass political support in Sweden? Before an explanation can be accepted as authoritative, it must be shown to (1) provide a good fit with empirical data, (2) maintain that good fit even when other, potentially relevant factors are taken into consideration, and (3) display predictive power equal or superior to that of other, competing explanations. In the first respect, the performance of the political-economic interpretation has been quite impressive; whenever they have been put to the test, economic factors have emerged as powerful predictors of mass political support in Sweden. In the latter two respects, though, the political-economic explanation remains untested, for the studies by Madsen, Frey, and Jonung & Wadensjö, while consistently demonstrating significant macroeconomic effects upon mass political support, have failed to consider a number of potential *non-economic* influences on mass political support.

While Madsen, Frey, and Jonung & Wadensjö all operated within an explicitly-stated political economy framework, the study by Carlsson et al. was undertaken completely outside of, and betrayed no familiarity with, that framework. Their focus was on the impact of the mass media upon social change, 'a classic problem in the sociology of communication', the field toward which their work was oriented (Carlsson et al. 1980, 227). In order to address that issue, they — like Frey and Jonung & Wadensjö — analyzed short-term trends in mass political support in Sweden, concentrating on the proportion of the public supporting the Social Democrats on a quarterly basis from 1967 through 1974. What sets their analysis apart is the fact that non-economic factors play a central role in their analysis. These non-economic factors were represented by two measures of the editorial content of Swedish

newspapers — a feature of their work that provides a certain continuity with Brody's work on media content as a determinant of presidential popularity in the United States (e.g., Brody & Page 1975; Haight & Brody 1977). Economic factors entered their analysis only secondarily, in the form of the demand for labor. A further, and unfortunate, point of dissimilarity between work of Frey and Jonung & Wadensjö, on the one hand, and Carlsson et al., on the other, is that the latter eschewed 'any elaborate schemes of multivariate analysis' and restricted themselves to simple correlations and an occasional partial correlation. This approach did not permit them to gauge the overall impact of their full set of predictors, nor did it facilitate evaluation of the relative impacts of these predictors. More seriously, their reliance upon simple OLS-based techniques to analyze time-series data ran the risk of violating the assumption, central to the OLS model, of uncorrelated error terms. When that assumption is violated, the OLS model must be abandoned in favor of more appropriate procedures, which can produce dramatic departures from conclusions based on OLS results — the classic demonstration being Hibbs' (1974) re-estimation of Mueller's (1973) model of presidential popularity. These methodological criticisms suggest not only that Carlsson et al. did not derive maximum mileage from their data, but also — and far more importantly — that the findings they reported are suspect. Accordingly, their analysis provides no satisfactory answers to the questions left unanswered by the Madsen, Frey, and Jonung & Wadensjö studies.

Data

Four of the five variables in the present analysis are taken directly from the Carlsson et al. study (1980, 232, Table 11.1). The dependent variable, labelled POPULARITY below, indexes popular support for the governing party, which throughout the period under consideration (1967-1974) was the Social Democrats. Popularity is measured as those favoring the Social Democrats as a percentage of all those expressing an opinion when asked which party they favored in polls carried out by the Sifo Institute, the leading Swedish polling organization. Between 1967 and 1974, approximately ten such surveys were conducted per year, each with a nationally representative sample of roughly 1,000 respondents. These survey results, like all the other variables used in this study, are aggregated into three-month blocks, for a total of 32 quarterly observations.

There are four independent variables. The first, which Carlsson et al. interpreted as a measure of 'social structure' but which fits into the political economy framework as a direct — indeed, a superior — measure of economic expectations (cf. Monroe & Levi 1979), is based on Swedish managers' estimates of their need for labor in the immediate future. These estimates were elicited through surveys conducted as part of the official Swedish

economic forecasting system. The actual indicator (labelled LABOR) is the percentage of firms indicating a need for more unskilled labor. A second economic variable, which was not part of the Carlsson et al. study but which seems highly appropriate in light of the findings reported by Frey and Jonung & Wadensjö, is the inflation rate. The indicator of inflation employed here is the quarterly Consumer Price Index (CPI), calculated from monthly data given in the *Monthly Digest of Swedish Statistics* (*Allmän Manadsstatistik,* 1967-1974).

The remaining two independent variables are based on Carlsson et al.'s content analysis of news and editorial coverage in a random sample of Swedish newspapers. Carlsson et al. experimented with various content indicators but ultimately settled on two, both of which pertained to editorial rather than news content. The first (CRITICISM) is the percentage of editorials during a quarter with comments critical of the Social Democrat-led government. The second (PESSIMISM) is the percentage of editorials, whatever their focus may have been, expressing negative evaluations; the logic underlying the latter indicator is that 'a high incidence of negative evaluations in the editorials of the daily press points to a general mood of pessimism, to a general feeling that conditions are getting worse, perhaps even running out of control' (Carlsson et al. 1980, 231).

Findings

On the basis of simple correlations, Carlsson et al. concluded that public support for the Social Democrats, 1967-1974, was very closely linked to both the demand for unskilled labor and media criticism of the government but that media pessimism did not affect support for the Social Democrats. Table 1 summarizes an OLS regression of POPULARITY and LABOR, CPI, CRITICISM, and PESSIMISM. All that need be said about the OLS results is that the Durbin-Watson statistic suggests significant model misspecification due to the operation of first-order autoregressive error. After further analysis following procedures outlined by Hibbs (1974) confirmed this possibility, the model was refitted via pseudo-generalized least squares estimation, also described by Hibbs (1974). The results of the GLS estimation are shown in Table 2.

The GLS results indicate that a substantial share of what appears in the OLS regression to be extremely strong predictive power is illusory, an artifact of the misspecification of the OLS model. When appropriate measures are taken to counter the autocorrelation problem, the proportion of explained variance in POPULARITY declines appreciably. Nonetheless, the performance of the GLS model is quite impressive: LABOR, CPI, CRITICISM and PESSIMISM jointly account for approximately two-thirds of the variance over time in POPULARITY.

The other major insights to be gleaned from Table 2 relate to the relative

Table 1. OLS Regression Summary

Predictor	b/(t-ratio)	beta weight
Constant	52.90***	
	(18.19)	
LABOR	0.23***	.74
	(8.33)	
CPI	—0.05***	—.63
	(—4.50)	
CRITICISM	—0.05***	—.64
	(—5.00)	
PESSIMISM	0.004	.01
	(0.14)	
R = .900, R² = .811, d.w. = 1.13		

*** p < .001

Table 2. GLS Regression Summary

Predictor	b/(t-ratio)	beta weight
Constant	50.75***	
	(14.35)	
LABOR	0.21***	.67
	(6.04)	
CPI	—0.04***	—.50
	(—3.10)	
CRITICISM	—0.04***	—.51
	(—3.15)	
PESSIMISM	0.01	.03
	(0.42)	
R = .805, R² = .647		

*** p < .001;   ** p < .01

performance of the various predictors. PESSIMISM displays no independent effect on POPULARITY, casting extreme doubt on Carlsson et al.'s 'mood' interpretation. LABOR emerges as the foremost predictor of POPULARITY, with strong independent contributions also being made by both CPI and CRITICISM. Interestingly enough, a re-estimation of the model with one-quarter lags on LABOR (see Parker 1979) and the other independent variables produces much weaker results (not shown in Table 2), with R² falling all the way to .44. To the extent, then, that LABOR, CPI, and CRITICISM affect POPULARITY, these effects appear to be concomitant rather than delayed.

Conclusion

These findings, in combination with those given by Madsen (1980), Frey (1979), and Jonung & Wadensjö, demonstrate that a political-economic model of government support performs quite well for the nation of Sweden.

It does not perform as well as the correlational findings reported by Carlsson et al., taken at face value, might suggest; but these correlational findings cannot be taken at face value in light of the shortcomings of OLS-based technique in the presence of serial autocorrelation.

After probing the impacts of several different economic variables, Madsen concluded that changes in the level of unemployment ranked alongside changes in per capita gross domestic product as the foremost economic factor underlying electoral support for the Social Democrats. The analyses reported by Frey and Jonung & Wadensjö also pointed to the employment situation as one of the major, if not the major, determinants of mass political support. The impressive showing of the LABOR variable in the present study is entirely consistent with these earlier findings. It is consistent as well with conclusions about the political implications of unemployment that have been reached in analyses for a number of different countries (e.g., Frey & Schneider 1975, Rosa 1980; Hibbs & Vasilatos 1981). This convergence of evidence suggests that notwithstanding Mueller's (1973) puzzling evidence that unemployment was *positively* related to support (a finding subsequently challenged by Hibbs (1974), unemployment is a strong determinant of negative public assessments of government performance.

It is thus especially interesting that when the Social Democrats were finally turned out of power in 1976, their defeat came in the face of what many would consider their highly successful political control of the economy (Schmidt 1983, 15). The electoral punishment of the Social Democrats may in this sense seem paradoxical and undeserved. However, in analyzing the Swedish case, one must bear in mind that in Sweden more than almost any other advanced Western democracy the government has assumed the lead role in promoting economic stability. Any lingering economic shortcomings, which can be maintained even in a situation that by comparative standards seems to function quite well, can thus be turned against the governing party far more effectively than would be possible in nations where the government plays a more limited economic role.

More generally, the findings reported here suggest some fairly clearcut answers to the question that was posed earlier concerning the validity of the political-economic model of mass political support in Sweden. Indicators of inflation and the unemployment situation (especially the latter) are strongly related to the popularity of the Social Democrat-led government during the 1967-1974 period. Other factors, represented in the present study by newspaper criticism of the government, helped shape mass political support as well, but there can be no doubt that the major source of short-term trends in mass support for the Social Democrats was economic in nature.

REFERENCES

Allmän Manadsstatistik (*Monthly Digest of Swedish Statistics*). 1967-1974. Stockholm: National Central Bureau of Statistics.

Brody, R.A. & Page, B.I. 1975. 'The Impact of Events on Presidential Popularity: The Johnson and Nixon Administrations,' pp. 136-148 in A. Wildavsky (ed.), *Perspectives on the Presidency*. Boston: Little, Brown.

Carlsson, G., Dahlberg, A. & Rosengren, K.E. 1980. 'Mass Media Content, Political Opinions, and Social Change: Sweden 1967-1974', pp. 227-240 in K.E. Rosenberg (ed.), *Advances in Content Analysis*. Sage Annual Reviews of Communication Research Vol. 9. Beverly Hills, Cal.: Sage Publications.

Frey, B.S. & Schneider, F. 1975. 'On the Modelling of Politico-Economic Interdependence', *European Journal of Political Research 3*, 339-360.

Frey, B.S. 1979. 'Politometrics of Government Behavior in a Democracy'. *Scandinavian Journal of Economics 81*, 308-322.

Goodhart, C.A.E. & Bhansali, R.J. 1970. 'Political Economy'. *Political Studies 18*, 43-106.

Haight, T.R. & Brody, R.A. 1977. 'The Mass Media and Presidential Popularity: Presidential Broadcasting and News in the Nixon Administration.' *Communication Research 4*, 41-60.

Hibbs, D.A., Jr. 1974. 'Problems of Statistical Estimation and Causal Inference in Time-Series Regression Models', pp. 252-308 in H.L. Costner (ed.), *Sociological Methodology 1973-1974*. San Francisco: Jossey-Bass.

Hibbs, D.A., Jr. & Vasilatos, N. 1981. 'Macroeconomic Performance and Mass Political Support in the United States and Great Britain', pp. 31-48 in D.A. Hibbs, Jr., and H. Fassbender (eds.), *Contemporary Political Economy*. Amsterdam: North-Holland.

Jonung, L. & Wadensjö, E. 1979. 'The Effect of Unemployment, Inflation and Real Income Growth on Government Popularity in Sweden', *Scandinavian Journal of Economics 81*, 343-353.

Kramer, G.H. 1971. 'Short Run Fluctuations in U.S. Voting Behavior, 1896-1964', *American Political Science Review 65*, 131-143.

Madsen, H.J. 1980. 'Electoral Outcomes and Macro-Economic Policies: The Scandinavian Cases', in P. Whiteley (ed.), *Models of Political Economy*. London: Sage Publications, 15-46.

Miller, W.L. & Mackie, M. 1973. 'The Electoral Cycle and the Asymmetry of Government and Opposition Popularity: An Alternative Model of the Relationship Between Economic Conditions and Political Popularity', *Political Studies 21*, 263-279.

Monroe, K.R. & Levi, M.D. 1979. 'Economic Expectations and Presidential Popularity: A Model of the Short-Term Politico-Economic Interactions', paper presented at the Annual Meeting of the Public Choice Society, Charleston, S.C.

Mueller, J.E. 1973. *War, Presidents and Public Opinion*. New York: John Wiley & Sons.

Parker, G.R. 1979. 'Trends in Party Preferences 1949-1976', *American Politics Quarterly 7*, 132-146.

Rosa, J.J. 1980. 'Economic Conditions and Elections in France,' pp. 101-120 in P. Whiteley (ed.), *Models of Political Economy*. London: Sage Publications.

Schmidt, M.G. 1983. 'The Welfare State and the Economy in Periods of Economic Crisis: A Comparative Study of Twenty-Three OECD Nations', *European Journal of Political Research 11*, 1-26.